

Determining factors related to artificial intelligence (AI) adoption among Malaysia's small and medium-sized businesses

ABSTRACT

The purpose of the study is to examine the relationship between Competitive Pressure (CP), Top Management Commitment (TMC), Employee Adaptability (EA), External Support (ES), Organization Readiness (OR) and Artificial Intelligence Adoption (AIA) among SMES operating in Sabah, Malaysia. By employing judgemental sampling a total of 196 respondents were involved (i.e., owners or managers) in varied SME sectors such as services, manufacturing, construction, agriculture, and mining & quarrying. A survey questionnaire was used for data collection and analysed using Smart PLS 4. The results revealed that top management commitment and organization readiness have a significant relationship with AI adoption. However, competitive pressure, employee adaptability, and external support have an insignificant impact on AI adoption. This suggests that SME organizations may benefit from focusing on and enhancing TMC and OR practices to improve AI outcomes. Overall, these findings can guide decision-making and resource allocation, emphasizing the importance of OR and TMC in driving desired outcomes related to AI and highlighting areas where efforts may not yield significant effects. Based on present technological demands, practical implications and future research directions are also highlighted.